WEDNESDAY • October 25, 2000

Clinical Congress News

The American College of Surgeons • 86th Clinical Congress • October 22-27, 2000 • Chicago

Internet/telemedicine virtually changing surgery

Expanded use of the Internet, telemedicine, and telementoring are changing the way patients receive care, the way physicians provide services, and the way surgical students learn, according to participants in the panel discussion Health Care on the Internet in the New Millennium. The general session took place on Tuesday morning, and M. Michael Shabot, MD, FACS, of the Regents' Committee on Informatics served as moderator.

The Internet, "by putting patients and physicians together electronically, creates a new paradigm in health care delivery," said Charles E. Saunders, MD, chief medical officer of WebMD, Inc., based in Santa Clara, CA. Once the Internet became open to just about anyone with a PC on their desk, patients began seeking out medical information through Web-based services. Indeed, "consumer adoption has wildly exceeded expectations," Dr. Saunders added. As a result, patients are more empowered in their medical decision making and physicians and medical facilities are changing the ways they interact with their patients.

Even so, physician adoption of the Internet as a communications vehicle has been slow when compared with Internet usage among patients, Dr. Saunders said. Nonetheless, Dr. Saunders predicted surgeons will become more involved with the Internet in waves. Currently, physicians are primarily using the Internet to retrieve information, but soon they will be using it at point-of-care through telemedicine, and their offices will integrate it as they seek opportunities to reduce administrative costs.

It is important that surgeons get online as soon as possible, Dr. Saunders added, as there will be various "challenges and pitfalls" associated with the expanding use of electronic communication. These roadblocks include workforce limitations, time to set up a viable and appropriate system, cost, and security of patient information.

The Internet and electronic communication may have been radical concepts 10 years ago, and some of the advances taking place in telemedicine still sound like the stuff of science fiction. However, high-tech approaches to treatment, such as the application of virtual reality in the medical laboratory, are becoming more widely used and accepted. Jonathan C. Silverstein, MD, FACS, assistant professor of surgery at the University of Illinois Medical Center in Chicago, IL, provided several examples of virtual reality techniques that are being used successfully at his facility.

For instance, the University of Illinois has an electronic visualization lab that "combines the real world with the virtual world," Dr. Silverstein said. The simulators used in the lab allow surgeons and surgical trainees to view, study, and "operate" on delicate parts of the anatomy that they might not otherwise be as accessible to them. More specifically, this technology is being used to help students learn about temporal bone anatomy and the pelvic floor.

Additionally, Dr. Silverstein said that telecommunications/telemedicine techniques are being applied in the laboratory, allowing physicians to converse, see each other, and demonstrate their methods with three dimensional images. "This is where the real, major power comes in," Dr. Silverstein added.

Dr. Silverstein's sentiments were echoed by John J. Bauer, MD, who spoke about how the U.S. Army, in which he served previously as Lt. Colonel, teamed up with John Hopkins Medical Center in Baltimore, MD, to develop telementoring technology. Telecommunications was applied as physicians in one location assisted those in another, remote place in performing a range of general surgery and urology procedures. All the cases were successfully completed, no complications arose, and the operative time did not increase. "Telesurgery has the potential to improve surgical care," Dr. Bauer noted. "We did it. It works. It seems safe."

Jeffrey S. Levy, MD, chair and chief

(continued on page 2)

Science and Humanism Seminar

Disease and creativity: Is there cause and effect?

Does illness contribute to an artist's creativity? If it does, will it ever be possible to relieve the artist of the condition without blocking vision? These are two of the questions panelists attempted to answer during the Science and Humanism Seminar, Disease and Creativity, which took place on Monday afternoon and was moderated by C. Rollins Hanlon, MD, FACS, Executive Consultant to the College.

Philip Sandblom, MD, PhD, FACS (Hon) and author of the seminal book, *Creativity and Disease*, noted that many poets, writers, artists, and musicians throughout history have continually used their works to express a range of opinions about the physicians who treated them for illness. Some of these artistic expressions communicate the horrors of treatments inflicted at time when "medicine had not yet reached the age of enlightenment," Sandblom said. Examples of some the more bizarre and inhumane practices common in the 16th century and depicted in art, for instance, included bloodletting and contorting the body in painful and bizarre ways to prepare patients for bladder stone removal.

At other times, artists used their creative powers to demonstrate the joys of release from illness. For example, Dr. Sandblom said that Spanish painter Goya suffered from deafness and depression and often used his paintings to lash out sarcastically at what he may have considered to be unfair, untreatable situations. However, physicians were able to save him from tuberculosis. After that experience, Goya became uplifted and began depicting more of the beauty in life, Dr. Sandblom said.

Similarly, Beethoven was known for his volatile musical expressions, which may have resulted from his frustrations with deafness. However, Beethoven also battled several bouts of cirrhosis of the liver, which physicians were able to cure. After these experiences, he wrote some his most beautiful music.

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Left to right: C. Rollins Hanlon, MD, FACS; M. Therese Southgate, MD; Frederick K. Goodwin, MD; and Philip Sandblom, MD, PhD, FACS (Hon).

The Committee on Young Surgeons congratulates the 2000 ACS Initiates

2000 Initiates' Program
The Joy of a Surgical Career

Thursday, October 26
1:30 - 3:00 pm
McCormick Place South, Room S501

Sponsored by the Committee on Young Surgeons
Moderated by Kevin P. Lally, MD, FACS, Houston, TX

Program

Surgery in the Third World: Experiences in Afghanistan
James H. Duke, MD, FACS, Houston, TX

The Joy of Scholarship
Robert H. Bartlett, MD, FACS, Ann Arbor, MI

Education--Teaching Technical Skills
Lawrence W. Way, MD, FACS, San Francisco, CA

Balance in Your Surgical Career
Joseph C. Maroon, MD, FACS, Pittsburgh, PA

High school students welcomed today

Currently, only four to five percent of African-American and Hispanic physicians graduate from residencies in the surgical professions.

To begin to address this problem, the Graduate Medical Education Committee has begun a "Student Mentoring Project" to identify and recruit African-American and Hispanic students into the medical profession and eventually into surgery. The aim of this exciting new program is to provide information to high school students, their families, and their counselors about college and medical school requirements.

As a first step, 150 African-American and Hispanic 10th-grade students from Chicago Public Schools have been invited to attend the Clinical Congress today for "A Day at the American College of Surgeons."

This program is a rare opportunity for these young people to meet and interact with surgeons from all over the world. Surgeons have been recruited to be mentors for these students and will spend the day with them, touring the scientific session and attending the exhibit hall. Look for them, and greet them warmly!

At the end of the day, the high school students will meet a group of the senior medical students who are attending the Clinical Congress. They will learn from these medical students why they made their career choices. We also hope that the surgeons who meet these students and spend the day with them will be able to establish a relationship that will be maintained into the future.

If you are interested in learning more about this program, please contact Donna Coulombe, ACS Surgical Education and Research Department, telephone 312/202-5488, or e-mail dcoulombe@facs.org.

The following companies have supported the Clinical Congress with advertisements in the Exhibit Guide section of this issue:

American Red Cross
Aventis Pharmaceuticals
Baxter, Hyland Immuno
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Weck Closure Systems
Wyeth-Ayerst Pharmaceuticals

INTERNET/TELEMEDICINE, from page 1

education officer for MedCases, Inc., in Phildelphia, PA, took the concept of telementoring one step further in his discussion of the future of medical education. Some of this will be born of necessity. For instance, medical students and surgical residents have more limited clinical education encounters now that patients are having shorter hospital stays. Therefore, telemedicine and virtual reality allow them to view and perform procedures otherwise not possible in the standard patient care setting. Also, practicing physicians who are trying to learn techniques are finding it "harder and harder to leave our practices" to participate in continuing medical education courses.

Hence, technology is emerging that will someday offer users an "experiential learning environment;" that is to say, one where the simulated patients undergo virtual complications, reactions, and so forth to treatment, Dr. Levy indicated.

Evolving telementoring systems also will apply "something I call smart learning," Dr. Levy added. These systems will "maximize the learning potential for each student," adapting to his or her unique skills, intelligence, and learning methods.

DISEASE AND CREATIVITY, from page 1

While Dr. Sandblom focused on how experiences with health professionals have affected some of the world's most renown writers, artists, and musicians, Frederick K. Goodwin, MD, of the National Institute of Mental Health, focused on how psychiatry has evolved to strengthen insights into connections between mental illness and creativity. Dr. Goodwin noted that questions about the possible link between depression and creativity have concerned philosophers and others interested in the human condition at least as far back as Aristotle.

Modern psychiatry, however, is delving deeper into the connections between mental illness and how it affects creative output. Dr. Goodwin said playwrights, poets, politicians, and novelists have historically been afflicted with mental health problems, ranging from mild depression to full-blown manic-depression.

Studies being conducted through the Human Genome Project and other research efforts indicate that both creativity and mental illness often are based in heredity, Goodwin added. The goal of these endeavors, therefore, is becoming to find ways of controlling or eliminating the genes that cause adverse conditions without destroying an individual's ability to generate novel approaches to expressing themselves or leading others. In other words, Dr. Goodwin said, "can you take away the cloud without getting the silver lining?"

The third panelist, M. Therese Southgate, MD, writes the essays regarding the covers of the *Journal of the American Medical Association*. She centered her remarks directly on whether there does in fact appear to be a correlation between artistry and eccentricity, which she defined as being "out of the center."

Dr. Southgate noted that "the truth is we are all challenged. We are challenged by a condition known as mortality." It is the human to come to terms with the finite aspects of life that spurs creativity, she said.

As a matter of courtesy . . .

to the faculty and audience at the sessions of the annual Clinical Congress, attendees at all sessions are kindly requested:

(1) To silence beepers and cell phones.

(2) To refrain from using flash photography during the session.

Your cooperation is gratefully appreciated.

Clinical Congress News

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Computer index of brain injury may help surgeons prevent further hemorrhaging

A computerized method of quantifying the severity of brain injuries may help trauma surgeons identify in a matter of minutes which patients are at risk for continued cerebral bleeding so they can provide treatment that will prevent the injury from expanding. The brain planimetry index (BPI), which was described during a Surgical Forum session Tuesday afternoon, uses a computerized program from the National Institutes of Health (NIH) and a computed tomography (CT) scan of a patient's brain to calculate the total volume of brain injury and in the process detect tissue damage that is so severe it may cause a condition known as disseminated intravascular coagulopathy (DIC). "Patients with disseminated intravascular coagulopathy have a blood clotting disorder that adds to the initial brain injury. It produces further hemorrhage within the brain and consequently a poorer outcome," Rebecca A. Prince, a medical student at Oregon Health Sciences University School of Medicine, Portland, explained.

DIC can be reversed by promptly administering clotting replacement factors, such as fibrinogen and platelets. Treatment often is delayed, however, while surgeons wait for the results of blood tests.

The BPI has the potential to speed the diagnosis and treatment of DIC. "You may be able to take this computer program, put it right over the CT scan, and within seconds, get an index of the severity of the brain injury that indicates whether or not a patient is at increased risk to develop DIC and needs blood products," John C. Mayberry, MD, FACS, assistant professor of surgery, Oregon Health Sciences University School of Medicine, Portland, said.

DIC affects approximately five percent of patients who have sustained a concussion and 30 percent of brain-injured patients who exhibit distinct abnormalities on computed tomography, Dr. Mayberry said. DIC may arise immediately after a brain injury or up to 12 hours afterwards, and it occurs when damaged brain tissue releases thromboplastin, a tissue component that interferes with clotting.

Laboratory studies that assess the ability of the blood to coagulate can detect DIC. Surgeons typically order a trauma coagulation profile, which measures the levels of D-dimer and fibrinogen and the number of platelets in the blood, and wait to see if the coagulation factors decrease over time. "Even when the initial blood draw in the emergency department is normal, a patient may develop DIC eight to 12 hours later, and once you've found DIC, it may be too late to institute therapy because the size of the hemorrhage in the brain already has increased," Dr. Mayberry added.

Although patients with severe brain injuries have a higher risk of developing DIC, some patients with severe injuries do not develop the problem. Standard measurements of brain injury, such as the Glasgow Coma Scale and Injury Severity Score, consequently are not 100 precent predictive of DIC.

The BPI, which was developed by Ms. Prince, may provide a more accurate indication of the risk of DIC by serving as a surrogate measurement of the volume of brain injury or the percentage of brain surface area that has been damaged. The actual volume of brain injury has been difficult for surgeons to determine because trauma to the head may affect many areas of the brain, or it may create abnormalities that have an irregular appearance on CT. The NIH Image computer program eliminates the guesswork by computing the area and other measurements of selected regions of interest on color or gray scale images, such as those produced by CT.

The Image computer program, which is public domain image-processing and analysis program available over the Internet, has been used for a variety of medical research purposes such as measuring the volume capacity of the lungs, the volume of the prostate gland, or the total area of brain tumors. This is the first time the technology has been used to compute the percentage of damage to brain parenchyma," Ms. Prince said.

In a pilot study that was reported Tuesday afternoon, Ms. Prince superimposed the Image program over CT images of 18 brain injured patients, traced the borders of each abnormality as well the entire brain, and obtained the BPI for each patient. She then statistically analyzed the relationship between the index scores and abnormalities in coagulation tests. Ms. Prince found that the BPI correlated directly with D-dimer levels; the index predicted 70 percent of the variance in the initial D-dimer level, and every increase in BPI was associated with a 1.58 ng/mL increase in the D-dimer. The index also was inversely related to fibrinogen.

This pilot study indicates that the BPI may be a simple measure of the severity of brain injury, and therefore the risk of developing DIC. Nevertheless, larger studies are needed to validate the ability of the index to predict DIC, and thus, allow surgeons to tailor therapy for brain injured patients. "We wouldn't want to give blood products to every brain injured patient to reduce the chance that the patient may go on to develop DIC because giving fresh frozen plasma or any other blood product unnecessarily raises the risk of transmitting viruses. But within seconds of the CT scan, you could calculate the brain planimetry index and decide whether to give coagulation products," Dr. Mayberry ex-plained. "This kind of simple radiographic score may help us to identify quickly those patients who need treatment for DIC without waiting for the results of blood tests," Ms. Prince said.

Richard J. Mullins, MD, FACS, also participated in the study.

Programa Hispánico to debut Thursday

This year's Clinical Congress will feature the debut of a new initiative, Programa Hispánico 2000, to be held on Thursday, October 26, from 8:00 am to 3:00 pm, in McCormick Place East, Room E450b. The program will offer presentations that are simultaneously translated in Spanish and English.

During the early planning for this year's Congress, the College received a suggestion that such a program be incorporated into the Clinical Congress, based on a highly successful program that has been conducted for several years by Shlomo Raz, MD, FACS (Los Angeles, CA) as a component of the annual meeting of the American Urological Association. On further consideration, including contact with Dr. Raz and communication with the Governors of the College for Latin American countries, the Program Committee of the College readily concurred that such a program would be highly desirable and that, should it meet with success, it could become an annual part of the Clinical Congress.

Responsibility for organization of the program was placed in the hands of Gerald O. Strauch, MD, FACS, Director of the College's Department of Surgical Education and Research. As word of this program has spread, there has been uniform enthusiasm for it.

In developing the sessions for the program, two prominent considerations were felt to be critical: (1) that the faculty for the session include as many surgeons with Hispanic backgrounds as possible, and (2) that the subjects of the sessions be concerned with topics that have current high profiles within the practice of surgery.

The program has been divided into three components for this year. The first, beginning at 8:00 am, will be a session focusing on advanced techniques in minimal access surgical procedures, to be moderated by Carlos A. Pellegrini, MD, FACS (Seattle, WA).

Between the first and second sessions, attendees will be welcomed by James C. Thompson, MD, FACS, President of the College, David L. Nahrwold, MD, FACS, a member of the Board of Regents and Chair of the Program Committee, and Keith A. Kelly, MD, FACS, Chair of the International Relations Committee.

The second session, entitled Hot Buttons in Surgery, will be devoted to six important topics in surgical science or of socioeconomic interest to surgeons. Dr. Nahrwold will moderate this session.

The program will conclude in the afternoon with trauma case presentations to be moderated by Erwin F. Hirsch, MD, FACS (Boston, MA).

Simultaneous translation of the program, in English and Spanish, will be accomplished by the use of headsets. A complete listing of program presentations may be found on page 50 of the Clinical Congress Program Book.

Congress lectures to be archived for ACS Web site

Five sessions at this year's Clinical Congress have been selected to be "archived" for future presentation on the College's Web site.

The lectures will feature PowerPoint slides of the presentations along with an in sync audio voice-over.

The five sessions selected for archival are: Critical Pathways: Fast-Tracking Surgical Management (GS 05); Pain Control in the ICU: A Strategy for Management (GS 10); Evaluating Operative and Perioperative Risks in the Elderly (GS 32); Medical Errors: Improving Patient Safety (GS 40); and Minimizing Operating Room Catastrophes (MD 07).

Further details regarding the availability of the archived lectures on the College's Web site will be announced later this year.

Surgical Forum dedicated to Dr. Wells

The 51st volume of the *Owen H. Wangensten Surgical Forum* was dedicated to Samuel A. Wells, Jr., MD, FACS, at Tuesday morning's general session, Tissue Engineering: Organ Replacement in the 21st Century, sponsored by the Committee for the Forum on Fundamental Surgical Problems.

The following is the Surgical Forum dedication to Dr. Wells that was written by Jeffrey A. Norton, MD, FACS, San Francisco, CA, who is a member of the committee.

"The Committee for the Forum on Fundamental Surgical Problems dedicates the Forum volume each year to a preeminent surgical scientist who has made extraordinary contributions and is an exemplary role model for aspiring young academic surgeons. This year, the committee is pleased to honor Dr. Samuel A. Wells, Jr., who clearly epitomizes the academic surgeon and surgical investigator.

"Born in Cuthbert, GA, Dr. Wells received his undergraduate education and a doctor of medicine degree from Emory University in Atlanta, GA. He completed an internship and residency in internal medicine at Johns Hopkins Hospital in Baltimore, MD. From there he switched career paths and began a surgical residency at Barnes Hospital in St. Louis, MO, and subsequently completed his surgical training at Duke University Medical Center in Durham, NC. His investigative career began during residency when he was a clinical associate at the National Cancer Institute (NCI) and a guest investigator at the Karolinska Institute in Stockholm, Sweden. After completing his residency, Dr. Wells served as a senior investigator at the Surgery Branch of the NCI. He then returned to Duke as associate professor of surgery. He rapidly ascended to the rank of full professor and also became director of the National Institutes of Health-funded Clinical Research Unit, an unusual post for a surgeon. After a distinguished tenure at Duke, Dr. Wells became the Bixby Professor and chairman, department of surgery, at Washington University School of Medicine in St. Louis, MO, a position he held for 17 years. From Washington University he moved to Chicago to become the Director of the American College of Surgeons. In that position, he developed an NCI-funded clinical trials program that supports numerous clinical studies of surgical treatment for cancer patients. He currently is the Director of the Center for Clinical Trials and Evidence-Based Medicine.

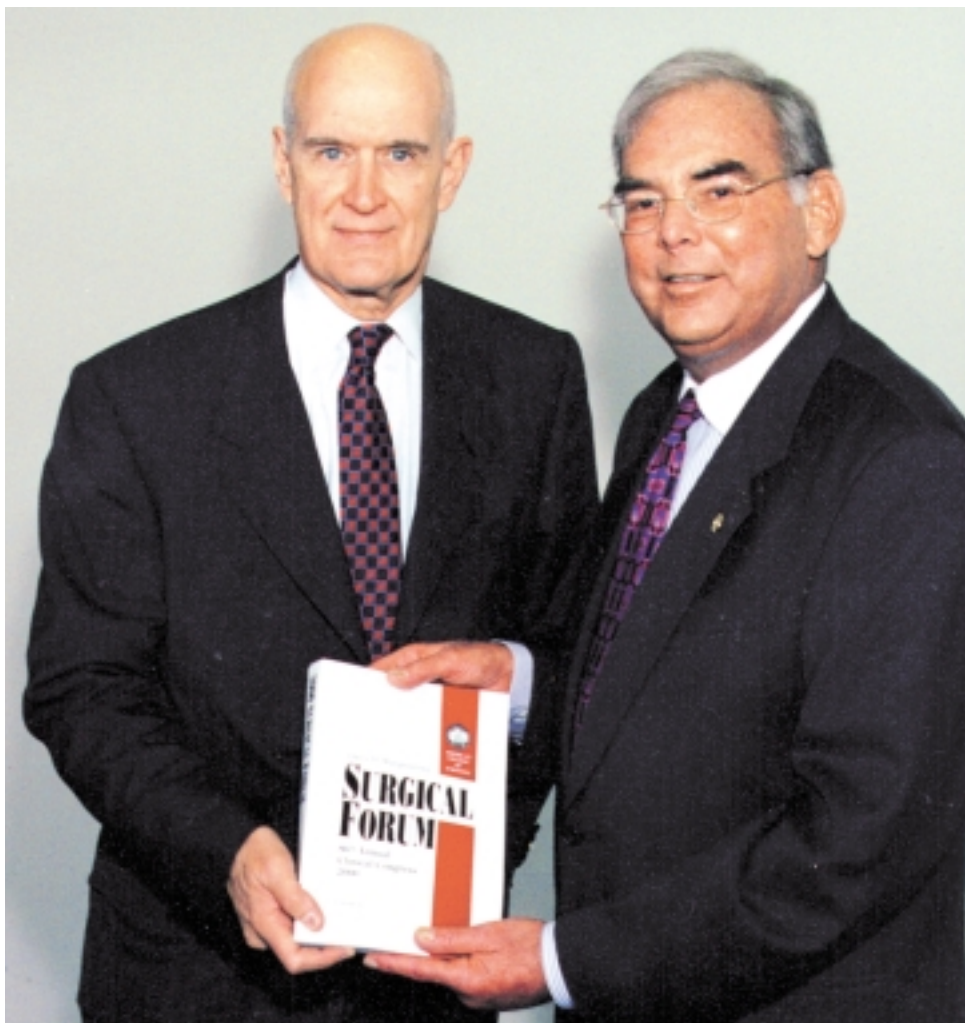
"Dr. Wells focused his laboratory research on a clinical problem: patients with the multiple endocrine neoplasia (MEN) syndromes (especially MEN 2a, MEN 2b, and familial medullary thyroid carcinoma [FMTC]), which are inherited as autosomal dominant traits. Of these syndromes, MTC is the most significant clinical component, as it is the most common cause of death in affected patients. Dr. Wells initially characterized the extent of endocrine abnormalities in families with these conditions while a senior investigator at the National Cancer Institute. He began a long-term study of these patients while on the faculties at Duke and Washington Universities. The diagnosis of MTC was documented by detecting elevated levels of the polypeptide hormone, calcitonin (CT). He and his colleagues showed that pentagastrin administered alone, or preferably in combination with intravenous calcium, was a potent secretagogue for CT. This provocative testing allowed the diagnosis of MTC to be established before it was evident clinically. By establishing the early diagnosis of MTC, thyroidectomy could be performed at an early stage of disease when the patient was curable.

"Dr. Wells's major accomplishment was defining the actual genetic abnormality in the different inheritable types of MTC. First, the gene defect for MEN 2a was mapped to the pericentromeric region of chromosome 10. A set of missense mutations of the RET protooncogene was identified as being responsible for both MEN 2a and FMTC. Subsequently, his group discovered that a similar mutation in RET was responsible for MEN 2b, except that the mutation was in the intracellular portion of this transmembrane gene, whereas the mutations for MEN 2a and FMTC were in the extracellular portion. Therefore, different mutations of the same gene were responsible for phenotypically different, inherited disease syndromes. Dr. Wells was the first surgeon to perform definitive cancer surgery based on a detected inherited gene defect. In individuals from kindreds with MEN 2a, total thyroidectomy was based only on the presence of a genetic mutation before there was any clinical or biochemical evidence of disease. Patients undergoing thyroidectomy had microscopic MTC confined to the thyroid gland and were cured by thyroidectomy.

"Thus, his research demonstrates an important principle for young surgical investigators. One should define a challenging disease process and investigate it, both in the laboratory and the clinic, to improve the treatment of patients. In 1970, Dr. Wells identified an inherited disease that had a 50 percent, five-year survival rate when treated by conventional surgical methods. Using pharmacologic methods, he developed new biomedical methods for earlier diagnosis of the disease. His group characterized the pathophysiology, including the exact gene defects that caused the MEN type 2 syndromes. His focused investigative approach to this clinical problem changed the way that patients with MEN 2 are managed and resulted in the cure of a potentially fatal condition. For this work, Dr. Wells received the prestigious Ernst Jung Award for outstanding medical research from the Federal Republic of Germany, the Joseph H. Burchenal Clinical Research Award from the American Association for Clinical Research, and the C. Chester Stock Award from the Memorial Sloan-Kettering Cancer Center.

"Most recently, Dr. Wells has changed his research focus to clinical cancer trials at a national level. His working hypothesis is that the best way to have an impact on the surgical treatment of solid tumors is through prospective randomized multi-institutional trials designed and conducted by surgeons. Because of this belief, he developed the American College of Surgeons Oncology Group (ACOSOG). This group has secured NCI funding to initiate and conduct trials to improve the surgical treatment of cancer. Although the program is new, it already appears to be a guaranteed success.

"As we review his career, we realize why the Forum Committee chose to dedicate this volume of the Surgical Forum to Dr. Wells. This dedication is especially significant to me, because Dr. Wells has been my teacher, professional colleague, friend, and mentor. He epitomizes all that is outstanding and superior in surgery. Each of the patients with MTC whom he has cured is a living example of the importance of scientific research in the practice of modern surgery."



Samuel A. Wells, Jr., MD, FACS (left), receives a copy of the *Owen H. Wangensteen Surgical Forum*, Volume LI, from David Tapper, MD, FACS, Chair, Committee for the Forum on Fundamental Surgical Problems.

The 2000 National Safety Council Surgeon's Award for Service to Safety was presented this year to Charles C. Wolferth, Jr., MD, FACS (center), "whose long and distinguished surgical career has been dedicated to the care of the injured in his personal practice, by his devotion to the education and training of surgeons in trauma care, and by his unparalleled personal impact on the institution and continuing success of the trauma system of the state of Pennsylvania."

Presenting the award on Monday evening on behalf of the National Safety Council were David B. Hoyt, MD, FACS (left), Chair of the ACS Committee on Trauma, and Ronald V. Maier, president, American Association for the Surgery of Trauma.

Allied Meetings

Wednesday

Morning

International Society of Surgery (SIC)
6:45 am - 8:00 am. Breakfast
Hilton Chicago, Boulevard A, Floor Second

Mosby
7:00 am - 9:00 am. Breakfast
Hilton Chicago, Marquette, Floor Third

Association of Women Surgeons
7:00 am - 10:00 am. Breakfast
Hilton Chicago, Boulevard B, Floor Second

American Society of Colon and Rectal Surgeons - CME Committee
7:30 am - 8:30 am. Breakfast
Hilton Chicago, 5A, Floor Five

American Society of Colon & Rectal Surgeons - Residents Committee
8:30 am - 9:30 am. Meeting
Hilton Chicago, 5D, Floor Five

Tripler General Surgery
11:00 am - 1:00 pm. Luncheon
Hilton Chicago, Boulevard A, Floor Second

Afternoon

Central Surgical Association
12:00 pm - 3:00 pm. Luncheon
Hilton Chicago, 5A, Floor Five

American Society of Colon and Rectal Surgeons - RF-Young Researchers
12:00 pm - 1:00 pm. Luncheon
Hilton Chicago, PDR 7, Floor Third

American Society of Colon and Rectal Surgeons - Professional Outreach Committee
3:00 pm - 4:00 pm. Meeting
Hilton Chicago, PDR 5, Floor Third

Evening

University of Colorado Department of Surgery
5:30 pm - 7:30 pm. Reception
Hilton Chicago, Joliet, Floor Third

Metropolitan Group Hospitals Residency in General Surgery
6:00 pm - 8:00 pm. Reception
Fairmont Hotel, Ambassador, Floor International Ballroom

Society of Graduate Surgeons of USC/LAC
6:00 pm - 8:00 pm. Reception
Hilton Chicago, Astoria Room, Floor Third

Departments of General & Cardiothoracic Surgery, Stanford University
6:30 pm - 9:00 pm. Reception
Hilton Chicago, Waldorf Room, Floor Third

Cook County Hospital, Karl Meyer Surgical Alumni Banquet
6:30 pm - 9:30 pm. Reception/Dinner ($85.00 per person. For reservations call 312-633-8716.)
Mid-America Club, TB, Floor Above Lobby

Meharry Medical College/Matthew Walker Surgical Society
7:00 pm - 9:00 pm. Reception
Hilton Chicago, PDR 1, Floor Third

Michigan State University Department of Surgery
7:00 pm - 9:00 pm. Reception
Chicago Marriott Downtown, Michigan/Michigan State, Floor Sixth

North American Chinese Surgical Society
6:30 pm – 9:30 pm. Dinner
Szechwan East, 340 E. Ohio St., 312/255-9200

Thailand Chapter of the ACS
6:00 pm. Reception/Dinner
Taste of Siam Restaurant, 600 S. Dearborn (at Harrison Avenue), 312/939-1179

Thursday

Morning

American Society of Colon and Rectal Surgeons-Standards
7:00 am - 8:30 am. Breakfast
Hilton Chicago, Pullman Boardroom, Floor Four

Afternoon

American Society of Colon and Rectal Surgeons - PR Committee
12:00 pm - 1:30 pm. Luncheon
Hilton Chicago, 5E, Floor Five

American Society of Colon and Rectal Surgeons - DC+R Editorial Board
4:00 pm - 6:00 pm. Meeting
Hilton Chicago, Waldorf Room, Floor Third

Friday

Morning

American Society of Colon and Rectal Surgeons - Website Committee
7:30 am - 8:30 am. Breakfast
Hilton Chicago, McCormick Boardroom, Floor Four

Afternoon

American Society of Colon and Rectal Surgeons - Pre-agenda Meeting
3:00 pm - 5:00 pm. Meeting
Hilton Chicago, PDR 6, Floor Third

American Society of Colon and Rectal Surgeons - Executive Council
5:00 pm - 10:30 pm. Meeting
Hilton Chicago, 4A, Floor Four

Topical ibuprofen may prevent atrial fibrillation after open-heart surgery

Postoperative atrial fibrillation is something of a mystery. Chaotically rapid beating of the atria (heart chambers) affects approximately 40 percent of the 400,000 patients who undergo coronary artery bypass graft (CABG) or heart valve surgery every year in the United States, according to Adam E. Saltman, MD. The arrhythmia (lack of normal rhythm) is not life-threatening; however, it extends hospital length-of-stay one to two days; increases the time a patient must spend in the intensive care unit following surgery; and requires increased use of medications to calm the upper chambers of the heart.

Although surgeons have been studying the phenomenon for years, it is not clear what factors predispose a patient to postoperative atrial fibrillation or what causes the arrhythmia.

Research presented at a Surgical Forum session Monday afternoon provides the first indication that postoperative atrial fibrillation may be due to inflammation, and it may be prevented by applying common anti-inflammatory drugs, such as ibuprofen, directly to the heart during open-heart surgery. "Topical application of an anti-inflammatory agent is appealing because it would treat an essentially local problem with a locally applied medication," according to Dr. Saltman, assistant professor of surgery and physiology, State University of New York at Stony Brook, New York. "The surgeon has access to the heart during surgery so it would not be difficult to administer the drug. Topical administration of an anti-inflammatory drug during surgery also would avoid giving patients a systemic anti-inflammatory agent that can cause adverse effects, such as gastrointestinal or kidney problems, or giving multiple drugs after surgery," he added. Many of the drugs that are given to treat atrial fibrillation after open-heart surgery are not benign medications; they cause side effects, Dr. Saltman explained. "Why treat patients with these drugs if they can be avoided?" he asked.

At present, Dr. Saltman is attempting to arrange for a clinical trial that will evaluate the effect of topical administration of ibuprofen on the heart during open-heart surgery. "The incidence of this form of arrhythmia is high enough that, if there is a significant effect from ibuprofen, we should see it quickly," he pointed out.

Dr. Saltman suspected that inflammation played a role in the development of postoperative atrial fibrillation because the timing of arrhythmia coincides with the peak inflammatory period following surgery. "Atrial fibrillation appears in the first 36 hours after surgery; after five to nine days, it is almost unheard of for a patient to get postoperative atrial fibrillation. What we know about the general inflammatory process after surgery and the appearance of postoperative atrial fibrillation seem to parallel each other perfectly," he said.

Dr. Saltman tested his hypothesis in a classic animal model of the cardiac inflammatory reaction. In his study, untreated animals had significantly faster electric conduction velocities in heart muscle. Animals that received topical ibuprofen had no sustained arrhythmias.

Before proceeding to clinical trials, Dr. Saltman will be experimenting with isolated cardiac tissue to determine whether inflammation alters the electrical properties of the heart or deranges cell-to-cell connections in heart muscle. He also will be exploring how human heart muscle changes over time. "By looking at human tissue from 40-year-old, 50-year-old, 60-year-old, 70-year-old, and 80-year-old patients, I can try to figure out if age has any effect on the development of postoperative atrial fibrillation. That is one way of discovering the factors that influence postoperative atrial fibrillation and determining whether patients in certain age groups would benefit most from topical ibuprofen," he said.

Because of the long history of ibuprofen use for a variety of inflammatory conditions, Dr. Saltman believes the drug would be safe and well tolerated by patients undergoing open-heart surgery. He can envision giving patients 600 mg of ibuprofen during surgery. "This would be a one-time dose, and 600 mg is not a large dose, so the drug should be well-tolerated," he said. Ibuprofen also is used safely by many patients every day. "Ibuprofen is a drug we're comfortable with in the medical world. Therefore, it should be safe to apply it to the surface of the heart, provided that surface is sterile," he concluded.

Also participating in the study were Joby Chandy, BS; Glenn R. Gaudette, MSc; James J. Murtha, MS; and Irvin B. Krukenkamp, MD, FACS.

Visit the ACS Resource Center

Surgeons who want to learn more about the College's activities and programs should be sure to visit the newly redesigned ACS Resource Center in the registration area of McCormick Place South. The exhibit provides information on: the Advanced Trauma Life Support Course; the American College of Surgeons Oncology Group (ACOSOG); the Candidate and Associate Society-American College of Surgeons; the Commission on Cancer; the Committee on Trauma; Communications activities; Health Policy and Advocacy; the *Journal of the American College of Surgeons*; National TRACS; The National Trauma Data Bank; Philanthropy; and the Surgical Education and Self-Assessment Program (SESAP). The ACS Resource Center is open from 7:00 am to 5:00 pm on Wednesday, and from 7:30 am to 5:00 pm on Thursday.

Program Changes

Scientific Exhibit

Additions/Changes

SE151
The Lateral Approach to Laparoscopic Left Colon Resection
Paul E. Sayad, MD, Robert N. Cacchiones, MD, George S. Ferzli, MD, FACS
Sponsor: Staten Island University Hospital, Staten Island, NY

SE181
Laparoscopic Management of Collateral Endoleak Following Endovascular Management of Abdominal Aortic Aneurysm
Robert N. Cacchione, MD, Paul E. Sayad, MD, Thomas Panetta, MD, George S. Ferzli, MD, FACS
Sponsor: Staten Island University Hospital, Staten Island, NY

SE267
Does Palliative Laparoscopic Gastrojepinostomy Benefit Patients With Gastric Outlet Obstruction?
M. Kurian, MD, B. Salky, MD, FACS, E. Edye, MB, BS, G. Dakin, MD, T. Vine, MD, FACS, B. Inabnet, MD, S. Zisman, MD, M. Reiner, MD, B. Katz, MD, A. Pomp, MD, FACS, M. Gagner, MD, FACS
Sponsor: Mount Sinai Medical Center, New York, NY

SE193
Transverse Incision Decreases the Incidence of Postoperative Incisional Hernias in Elective Abdominal Aortic Aneurysm Repair
Dimitrios Danikas, MD, Robert Singh, MD, Vick Chhokar, MD, Ernest Ginalis, MD, FACS, Constantinos Stratoulias, MD, FACS, George Constantinopoulos
Sponsored by Manmouth Medical Center, Division of Vascular Surgery, Long Branch, NJ

Motion Picture Session cancelled

The "Clinical Workshop through Films" Motion Picture Session originally scheduled for presentation on Monday evening from 7:30 to 10:30 pm was unexpectantly cancelled after the videotapes failed to arrive on time.

The College apologizes to the coordinator and members of the Committee on Medical Motion Pictures who put the program together, and regrets any inconvenience the cancellation may have caused Congress attendees. The identical program is scheduled to be presented at next year's Clinical Congress in New Orleans, LA.

Medical students attending this year's Congress and members of the Committee on Surgical Education in Medical Schools gathered for a group picture on Sunday evening. Seated, front row, left to right: Hollis W. Merrick III, MD, FACS (committee member); Linda G. Phillips, MD, FACS (committee member); Susan Kaiser, MD, FACS (committee member); Delford George Williams, MD, FACS (committee member); Tawnya L. Bowles, Dartmouth Medical School, Lebanon, NH; Shelly M. Cook, University of Illinois College of Medicine at Peoria, IL; Leigh Anne Neumayer, MD, FACS (Vice-Chair); Alisha Arora, University of Michigan Medical School, Ann Arbor, MI; and Nicholas P.W. Coe, MD, FACS (committee member).

Second row: Matthew R. Swelstad, University of Wisconsin Medical School, Madison, WI; James Franciosi, Medical College of Wisconsin, Milwaukee, WI; Alison Stuebe, Washington University School of Medicine, St. Louis, MO; Denise Gee, Boston University School of Medicine, Boston, MA; Britt M. Stockton, Tufts University School of Medicine, Boston, MA; Sarah Ketchum, Loyola University of Chicago, Stritch School of Medicine, Maywood, IL; Toni Michelle Ganzel, MD, FACS (committee member); Cesar A. Atienza, University of Louisville School of Medicine, Louisville, KY; Elisa Birnbaum, MD, FACS (committee member); Tawakalitu Salewa Oseni, Case Western Reserve University School of Medicine, Cleveland, OH; Michael Connolly, Allegheny University of the Health Sciences, MCP Hahnemman School of Medicine, Philadelphia, PA; Thomas G. Lynch, MD, FACS (Chair); and Juan C. Suarez-Vila, University of Puerto Rico School of Medicine, San Juan, PR.

Third row: Gary B. Fetzer, University of Iowa College of Medicine, Iowa City, IA; James F. McKinsey, MD, FACS (committee member); Kelly Gendreau, Unversity of Connecticut College of Medicine, Farmington, CT; Ajit K. Sachdeva, MD, FACS (committee member); Frederick S. Bongard, MD, FACS (committee member); Jennifer D. Tame, Finch University of Health Sciences, Chicago Medical School, Chicago, IL; Kim U. Kahng, MD, FACS (committee member); Ronnie Ann Rosenthal, MD, FACS (committee member); Bill Chiu, Northwestern University Medical School, Chicago, IL; Karen E. Deveney, MD, FACS (committee member); and Carlos Alejo, Universidad Central del Caribe School of Medicine, Baymon, PR.

Back row: Jonathan Reid Pettit, University of Kentucky College of Medicine, Lexington, KY; Allen T. Mikhail, University of Illinois College of Medicine, Chicago, IL; Allen Ho, Southern Illinois University School of Medicine, Springfield, IL; Adam D. Griesemer, University of Missouri, Columbia, School of Medicine, Columbia, MO; Annie Deshaies, Universite de Sherbrooke Faculty of Medicine, Sherbrooke, PQ; Thomas Altstadt, Indiana University School of Medicine, Indianapolis, IN; M. Alex Jacocks, MD, FACS (committee member); Peter Rogers, Memorial University of Newfoundland Faculty of Medicine, St. John's, Newfoundland; Flavio Rocha, University of Chicago Pritzker School of Medicine, Chicago, IL; Carlos E. Perez-Mitchell, Ponce School of Medicine, Ponce, PR; Christopher C. Baker, MD, FACS (committee member); and Matthew L. Moorman, Ohio State University College of Medicine, Columbus, OH.

Fellows attending the 2000 Clinical Congress should make a point of stopping by the exhibit hall to get a first-hand look at the newest technology available to them. Exhibit hours are 9:30 am to 3:30 pm on Wednesday, and 9:30 am to 1:30 pm on Thursday.

Registration totals

As of Tuesday afternoon, total registration for the Clinical Congress was 15,392; 8,201 were physicians and the rest were exhibitors, guests, spouses, or convention personnel.